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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/044,195	10/26/2001	Majid Syed	708034-605-005	9765
Blaney Harper Jones, Day, Reavis & Pogue 51 Louisiana Ave., NW Washington, DC 20001			EXAMINER NGUYEN, THUONG	
			ART UNIT 2455	PAPER NUMBER
			MAIL DATE 05/27/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/044,195

Applicant(s)

SYED, MAJID

Examiner

Thuong (Tina) T. Nguyen

Art Unit

2455

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/10/09.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is responsive to the amendment filed on 2/6/09. Claims 1, 19, 37 & 39 were amended. Claims 1-39 represent system for arbitrator system and method for national and local content distribution.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(c) which forms the basis for all obviousness rejections set forth in this Office action:

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 5-11, 13-19, 23-29, 31-39 are rejected under 35 U.S.C. 103(c) as being unpatentable over Kilkki, Patent No. 6,549,938 and Linden, Patent No. 2003/0009765 A1.

Kilkki teaches the invention as claimed including system and method for prioritizing multicast packets in a network service class utilizing a priority-based quality of service (see abstract).

4. As to claim 1, Kilkki teaches a system, comprising:

an arbitrator, said arbitrator determining at a broadcast side relative levels of data content based upon priority indicators, and service classes and service classes of data content received from a plurality of content providers (figure 1, 3-4; col 11, lines 58-66;

col 2, lines 5-15 & 45-55; col 3, lines 20-45; col 3, lines 60 – col 4, lines 17; Kilkki discloses that the system of determining the levels of data based on the service categories, service class and priority levels);

a scheduler, said scheduler sequencing said data content for broadcast based on said arbitrator determinations of relative levels of data content (col 4, lines 18-60; col 13, lines 40-65; Kilkki discloses that the system of scheduling the broadcasting program based on the priority levels, service categories and service classes).

But Kilkki failed to teach the claim limitation wherein an in-band on-channel (IBOC) transmitter broadcasting said data content based upon said sequencing.

However, Linden teaches multiple program burst broadcast (see abstract). Linden teaches the limitation wherein an in-band on-channel (IBOC) transmitter broadcasting said data content based upon said sequencing (page 1, paragraph 6; page 9, paragraph 81).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kilkki in view of Linden so that the system would be able to support broadcasting IBOC. One would be motivated to do so to dynamically alters the bandwidth allocated to particular system channel.

5. As to claim 5, Kilkki and Linden teach the system as recited in claim 1, wherein said data content is arbitrated based on a plurality of the following parameters: content type, transmission requirements, data type, time, end user device requirements (col 1, lines 65 – col 2, lines 5; Kilkki discloses that the system of determine the arbitrary based on the user device requirements).

6. As to claim 6, Kilkki and Linden teach the system as recited in claim 1, wherein said data content is prioritized, based on said priority indicators, as one of the following: extreme high priority for immediate data transmission, high priority for transmission at earliest opportunity, normal according to requested repetition rate, and low for transmission in slots left free after transmission of messages of extreme high priority, high priority, and normal priority (figure 4; col 10, lines 37-55; Kilkki discloses that the system of levels of priority).
7. As to claim 7, Kilkki and Linden teach the system of as recited in claim 1, wherein said priority indicators comprise one or more of the following fields: level of service, bit rate requirements, latency grades, or best effort required (col 10, lines 37-55; Kilkki discloses that the system of level of service).
8. As to claim 8, Kilkki and Linden teach the system as recited in claim 1, wherein said arbitrator determinations are further based upon a service operator code identifying said data content provider (figure 11).
9. As to claim 9, Kilkki and Linden teach the system as recited in claim 1, wherein said arbitrator determinations are further based upon a destination address representing a broadcast, multicast, or unicast scenario (col 16, lines 15-31; Kilkki discloses that the system of multicasting).
10. As to claim 10, Kilkki and Linden teach the system of as recited in claim 1, wherein said service classes comprise at least basic, preferred, or premium (figure 1).
11. As to claim 11, Kilkki and Linden teach the system as recited in claim 1. But Kilkki failed to teach the claim limitation wherein said service categories comprise at

least one, or a combination of: administrative, maintenance, advertisement, news, sports, weather, traffic, emergency alert, stocks, and entertainment, travel entities, medical, multimedia, audio, logo, or text.

However, Linden teaches the limitation wherein said service categories comprise at least one, or a combination of: administrative, maintenance, advertisement, news, sports, weather, traffic, emergency alert, stocks, entertainment, travel entities, medical, multimedia, audio, logo, or text (figure 2, page 1, paragraph 9).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kilkki in view of Linden so that the system would be able to broadcast multiple programs such as audio, video, text... One would be motivated to do so to stream the high and low programs for the broadcast.

12. As to claim 13, Kilkki and Linden teach the system as recited in claim 1, wherein said arbitrator determinations are further based upon periodicity requirements (figure 3).

13. As to claim 14, Kilkki and Linden teach the system as recited in claim 1, wherein said arbitrator determinations are further based upon validity determinations including periods of validity (col 10, lines 55-65; Kilkki discloses that the system of updating periodically).

14. As to claim 15, Kilkki and Linden teach the system as recited in claim 1. But Kilkki failed to teach the claim limitation wherein said arbitrator determinations are further based upon time stamps of said data content.

However, Linden teaches the limitation wherein said arbitrator determinations are further based upon time stamps of said data content (page 1, paragraph 9).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kilkki in view of Linden so that the system would base on the time stamp of the programs. One would be motivated to do so to stream the high and low programs for the broadcast.

15. As to claim 16, Kilkki and Linden teach the system as recited in claim 14. But Kilkki failed to teach the claim limitation wherein said arbitrator determinations are further based upon periodicity requirements.

However, Linden teaches the limitation wherein said arbitrator determinations are further based upon periodicity requirements (page 3, paragraph 30).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kilkki in view of Linden so that the system would base on the period or time interval of the programs. One would be motivated to do so to stream the high and low programs for the broadcast.

16. As to claim 17, Kilkki and Linden teach the system as recited in claim 1, wherein said arbitrator determinations are further based upon geographic classifications (col 3, lines 26-40; Kilkki discloses that the system of arbitrator based on the location of users).

17. As to claim 18, Kilkki and Linden teach the system as recited in claim 1, wherein said scheduler processes data for controlling display of information at a receiver (col 4, lines 18-60; Kilkki discloses that the system of schedule the broadcasting programs based on the priority levels).

18. Claims 19, 37-39 disclose a system, computer base and computer readable claims and do not teach or define any new limitations above claim 1 and therefore are rejected for similar reasons.

19. Claims 23-29, 31-36 disclose a system, computer base and computer readable claims and do not teach or define any new limitations above claims 5-11, 13-18 and therefore are rejected for similar reasons.

20. Claims 2 & 20 are rejected under 35 U.S.C. 103(c) as being unpatentable over Kilkki, Patent No. 6,549,938 B1 in view of Linden, Patent No. 2003/0009765 A1, and further in view of Beyda et al., U.S. Patent No. 5,935,218.

Kilkki teaches the invention as claimed including system and method for prioritizing multicast packets in a network service class utilizing a priority-based quality of service (see abstract).

21. As to claim 2, Kilkki and Linden teach the system as recited in claim 1. But Kilkki and Linden failed to teach the limitation wherein said system comprises a hierarchy of gateways, one or more first level gateways arbitrating and scheduling a first data content level and one or more second level gateways operatively connected to said first level gateway(s) and arbitrating and scheduling a second data content level.

However, Beyda teaches the invention substantially as claimed including method and apparatus for bus network prioritization using the broadcast of delay time to lower priority users from high priority users in a token or loop network (see abstract).

Beyda teaches the limitation wherein said system comprises a hierarchy of gateways, one or more first level gateways arbitrating and scheduling a first data content level and one or more second level gateways operatively connected to said first level gateway(s) and arbitrating and scheduling a second data content level (see figure 2, member 100; col 3, lines 4-10; 13-18; 28-32; Beyda discloses that the system that perform tasks which can be priority into two set, high priority and low priority users. Beyda also discloses that they chart which show the sequence steps taken by high priority and low priority to utilize a computer network).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Kilkki and Linden in view of Beyda so that the system could behave in hierarchy functionality. One would be motivated to do so have two set of gateway, which would operate separately to speed up the system.

22. Claim 20 disclose a system claim and do not teach or define any new limitations above claim 2 and therefore are rejected for similar reasons.

23. Claim 3-4 & 21-22 is rejected under 35 U.S.C. 103(c) as being unpatentable over Kilkki, Patent No. 6,944,430 B2, and in view of Linden, Patent No. 2003/0009765 A1, in view of Beyda et al., U.S. Patent No. 5,935,218 and further in view of Voit, Patent No. 2002/0044567 A1.

Kilkki teaches the invention as claimed including method and apparatus for automotive radio time shifting personalized to multiple drivers (see abstract).

24. As to claim 3, Kilkki, Linden and Beyda teach the system as recited in claim 2. But Kilkki, Linden and Beyda failed to teach the limitation wherein said one or more first level gateways arbitrating and scheduling a first data content level comprise at least a central gateway receiving requests from the plurality of content providers.

However, Voit teaches the invention substantially as claimed including an automatic programming of customer premises equipment for vertical services integration (see abstract).

Voit teaches the limitation wherein said one or more first level gateways arbitrating and scheduling a first data content level comprise at least a central gateway receiving requests from the plurality of content providers (page 12, paragraph 125; page 15, table 2; Voit discloses that the system which content plurality national/international content provider).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Kilkki, Linden and Beyda in view of Voit so that the system would behave as a hierarchy network, central gateway to level gateway. One would be motivated to do so to have a system function hierarchy but also can received request from all around the world.

25. As to claim 4, Kilkki, Linden and Beyda teach the system of as recited in claim 2. But Kilkki, Linden and Beyda failed to teach the limitation wherein said one or more second level gateways receive requests from a plurality of local content providers.

However, Voit teaches the limitation wherein said one or more second level gateways receive requests from a plurality of local content providers (page 12, paragraph 126; page 15, table 2; Voit discloses that the system for receiving and buffering ATM cells until it's recognized a complete frame for multiple content providers).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Kilkki, Linden and Beyda in view of Voit so that the system could receive request from different places in the world. One would be motivated to do so to improve the functionality of the system.

26. Claims 21-22 disclose a system claims and do not teach or define any new limitations above claims 3-4 and therefore are rejected for similar reasons.

27. Claim 12 & 30 are rejected under 35 U.S.C. 103(c) as being unpatentable over Kilkki, Patent No. 6,944,430 B2 in view of Linden, Patent No. 2003/0009765 A1, and further in view of Gross et al., U.S. Patent No. 6,782,510 B1.

Kilkki teaches the invention as claimed including system and method for prioritizing multicast packets in a network service class utilizing a priority-based quality of service (see abstract).

28. As to claim 12, Kilkki and Linden teach the system as recited in claim 1. But Kilkki and Linden failed to teach the limitation wherein said arbitrator determinations are further based upon language filtration identifiers.

However, Gross teaches the invention substantially as claimed including word checking tool for controlling the language content in documents using dictionaries with modifiable status fields (see abstract).

Gross teaches the limitation wherein said arbitrator determinations are further based upon language filtration identifiers (col 7, lines 30-56; Gross discloses that the system for filtering the language identification base on the pre-determination set).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Kilkki and Linden in view of Gross so that the system could identified the language. One would be motivated to do so to improve the system. One of the advantages is to identify the language.

29. Claim 30 disclose a system claim and do not teach or define any new limitations above claim 12 and therefore are rejected for similar reasons.

Response to Arguments

Applicant's arguments with respect to claims 1, 19, 37-39 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuong (Tina) T. Nguyen whose telephone number is 571-272-3864, and the fax number is 571-273-3864. The examiner can normally be reached on 9:00AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Thuong (Tina) T Nguyen/

Examiner, Art Unit 2455

/saleh najjar/

Supervisory Patent Examiner, Art Unit 2455